

4.5 PSP Cover Sheet (Attach to the front of each proposal)

Proposal Title: Last Chance Creek Project-Ferris-Meadowview Beach
 Applicant Name: Feather River Coordinated Resource Management-Plumas Corp.
 Mailing Address: P.O. Box 3880, Quincy, CA 95971
 Telephone: 530-283-3739
 Fax: 530-283-5465
 Email: plumasco@psln.com

Amount of funding requested: \$980,000.00 for 3 years

Indicate the Topic for which you are applying (check only one box).

- | | |
|---|---|
| <input type="checkbox"/> Fish Passage/Fish Screens | <input type="checkbox"/> Introduced Species |
| <input type="checkbox"/> Habitat Restoration | <input type="checkbox"/> Fish Management/Hatchery |
| <input checked="" type="checkbox"/> Local Watershed Stewardship | <input type="checkbox"/> Environmental Education |
| <input type="checkbox"/> Water Quality | |

Does the proposal address a specified Focused Action? yes ☒ no

*No focused actions were specified for this Topic.

What county or counties is the project located in? Plumas

Indicate the geographic area of your proposal (check only one box):

- | | |
|--|---|
| <input type="checkbox"/> Sacramento River Mainstem | <input type="checkbox"/> East Side Trib: _____ |
| <input checked="" type="checkbox"/> Sacramento Trib: _____ | <input type="checkbox"/> Suisun Marsh and Bay |
| <input type="checkbox"/> San Joaquin River Mainstem | <input type="checkbox"/> North Bay/South Bay: _____ |
| <input type="checkbox"/> San Joaquin Trib: _____ | <input type="checkbox"/> Landscape (entire Bay-Delta watershed) |
| <input type="checkbox"/> Delta: _____ | <input type="checkbox"/> Other: _____ |

Indicate the primary species which the proposal addresses (check all that apply):

- | | |
|--|--|
| <input type="checkbox"/> San Joaquin and East-side Delta tributaries fall-run chinook salmon | <input type="checkbox"/> Spring-run chinook salmon |
| <input type="checkbox"/> Winter-run chinook salmon | <input type="checkbox"/> Fall-run chinook salmon |
| <input type="checkbox"/> Late-fall run chinook salmon | <input type="checkbox"/> Longfin smelt |
| <input type="checkbox"/> Delta smelt | <input type="checkbox"/> Steelhead trout |
| <input type="checkbox"/> Splittail | <input type="checkbox"/> Striped bass |
| <input type="checkbox"/> Green sturgeon | <input type="checkbox"/> All chinook species |
| <input checked="" type="checkbox"/> Migratory birds | <input type="checkbox"/> All anadromous salmonids |
| <input type="checkbox"/> Other: _____ | |

Specify the ERP strategic objective and target (s) that the project addresses. Include page numbers from January 1999 version of ERP Volume I and II:

ERP Strategic Objectives #2 and #4, page 1, Vol. #1
Ecosystem Elements of Migratory waterfowl and neotropical migratory bird
guide, page 38, vol.1, stream meander, page 45, vol.1, natural floodplains
and flood processes, page 45, vol.1 and streamflow, constraints, upper
watershed conditions, page 49, vol.1, Opportunities, flexibility in
water release operating rules, page 52, vol.1 Stage 1 Expectations:
sustaining summer/fall baseflows, page 56, vol.1

Indicate the type of applicant (check only one box):

- | | |
|--|--|
| <input type="checkbox"/> State agency | <input type="checkbox"/> Federal agency |
| <input type="checkbox"/> Public/Non-profit joint venture | <input checked="" type="checkbox"/> Non-profit |
| <input type="checkbox"/> Local government/district | <input type="checkbox"/> Private party |
| <input type="checkbox"/> University | <input type="checkbox"/> Other: _____ |

Indicate the type of project (check only one box):

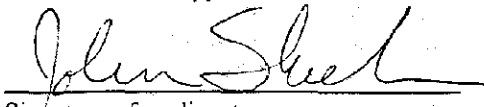
- | | |
|-------------------------------------|--|
| <input type="checkbox"/> Planning | <input checked="" type="checkbox"/> Implementation |
| <input type="checkbox"/> Monitoring | <input type="checkbox"/> Education |
| <input type="checkbox"/> Research | |

By signing below, the applicant declares the following:

- 1.) The truthfulness of all representations in their proposal;
- 2.) The individual signing the form is entitled to submit the application on behalf of the applicant (if the applicant is an entity or organization); and
- 3.) The person submitting the application has read and understood the conflict of interest and confidentiality discussion in the PSP (Section 2.4) and waives any and all rights to privacy and confidentiality of the proposal on behalf of the applicant, to the extent as provided in the Section.

John Sheehan

Printed name of applicant



Signature of applicant

EXECUTIVE SUMMARY

Project Title: Last Chance Creek Watershed Restoration Project—Ferris-Meadowview Reach -- Feather River Coordinated Resource Management (FR-CRM)

Project Description: The Last Chance Creek watershed, above the FR-CRM Doyle Crossing trend monitoring station, is a 90,000 acre forest and meadow ecosystem in the headwaters of the East Branch, North Fork Feather River (EBNFFR). 98% of the watershed is in the national forest system managed by the Plumas National Forest. Prior to Euro-American settlement the ecosystem functioned as a hydrologic sponge, absorbing and storing water from winter rains and spring snowmelt in subsurface aquifers, soils and streambanks, then slowly releasing this retained water as high quality, cold temperature baseflow to the river system through the summer and fall. The extensive system of meadows that border the Last Chance Creek channel and its tributaries were critical to this water retention/release process as well as serving as long-term storage of watershed sediments. The Last Chance watershed meadow system is the longest contiguous meadow complex (37 miles) in the Sierra Nevada drainage area of the Sacramento River. However, these critical ecosystem functions have been lost as a result of 125 years of cumulative impacts, including timber harvesting, wildfire, historic grazing and roadbuilding. Functioning meadow systems have been replaced by incised channels and lowered water tables, which has dramatically altered the timing and magnitude of flow. This response negatively impacts Bay-Delta species and beneficial uses.

Primary Biological/Ecological Objectives: The proposed restoration project on the Ferris-Meadowview reach, is a major component of the FR-CRM's far-reaching, collaborative effort to restore hydrologic function and meadow condition in the Last Chance Creek watershed. Objectives include restoring 9.1 miles of channel and 4330 acres of meadow by returning streamflow to abandoned remnant or reconstructed channels and rehabilitation of 1 mile of county road through relocation and/or surfacing. These efforts are expected to provide the following benefits:

- Increase summer baseflows for priority species and beneficial uses: an estimated .2- .4 acre feet/acre annually
- Improve water quality by reducing temperature and sediment
- Potentially decrease magnitude of floods
- Enhance current efforts to accurately monitor and quantify the above benefits
- Waterfowl/wetland enhancement
- Educate the public and provide technology transfer to adjacent watershed efforts

Cost: The Ferris-Meadowview project is expected to cost \$980,000.00

Local Support/Coordination: This project will be a major component of the ongoing Feather River CRM and USFS- Plumas National Forest restoration efforts in the Last Chance Creek watershed. Several early FR-CRM studies (EBNFFR Erosion Inventory Report, Soil Conservation Service, 1989; Cumulative Watershed Effects (CWE) Analysis, USFS, 1990; Non-Point Source Water Pollution Study, CWA Section 205j, Plumas Corporation, 1992) identified the Last Chance Creek watershed as one of the most severely dysfunctional subwatersheds in the

EBNFFR. The Plumas National Forest, Beckworth Ranger District is nearing completion a Watershed Analysis of the Last Chance Watershed as a precursor document identifying resources issues/concerns as well as management/restoration opportunities. The direct project area is under both private (30%) and federal (70%) ownership.

The first FR-CRM project in the Last Chance watershed was the Big Flat/Cottonwood Creek Project (1995), which has successfully demonstrated the meadow re-watering concept. The identified opportunity for extensive meadow re-watering in Last Chance has resulted in the establishment of a trend monitoring station at Doyle Crossing (funded by a grant from the Regional Council of Rural Counties-RCRC) to measure streamflow and temperature changes at the watershed scale. Operation of the Doyle Crossing station continues under a 319(h) grant as well as monitoring funds from future projects such as this.

Monitoring: The FR-CRM has consistently conducted qualitative and quantitative monitoring of projects, both for overall success and effectiveness as well as the function of specific techniques within the projects. This effort has led to immediate feedback (adaptive management) into subsequent design and implementation planning. Vegetative response, reversing the trend toward xeric (sagebrush, cheatgrass) species back to a hydric/mesic vegetation community (carex, salix), has been a consistent indicator of restored meadow hydrology. Temperature has been another strong indicator, easily monitored, that points toward a successfully restored water retention/release function. Overall project change can be most graphically illustrated by the establishment of photo points overlooking the project area. The Doyle Crossing trend station is intended to track changes in streamflow and temperature at the watershed scale resulting from the cumulative effects of this as well as other projects.

The Last Chance Creek watershed has a system of permanent monitoring reference sites that were established by the California Department of Water Resources (DWR). These sites consist of physical, biological and chemical data initially collected in June, 1998 on selected tributaries and the main stem of Last Chance Creek. Three of these baseline stations are within the proposed project area and would continue to receive regular remeasurement.

Adverse/Third Party Impacts: There are no foreseen adverse impacts to on-site or downstream resources beyond the unlikely event of complete project failure and resultant return to its existing condition. To date, similar projects have not shown that trend. Potential third-party impacts may be 1.) changes in grazing management schedules to allow full vegetative recovery for the project areas; 2.) closure/obliteration of short spur roads adjacent to the project areas. These issues will be cooperatively addressed with landowners/users through the CRM process. Please see attached letters of support from landowners/managers.

Applicant Qualifications: The Feather River Coordinated Resource Management group is a 21-entity consortium of Federal, state and local public, private agencies and academia dedicated to improving the health and function of the 3,222 mi² upper Feather River through the CRMP process. Plumas Corporation, a 501(c) (3), non-profit organization has been the primary implementation/coordination agency for the Feather River Coordinated Resource Management group projects. The FR-CRM has been sponsoring the implementation of stream/meadow restoration projects since 1985 which have totaled over \$6 million dollars.

PROJECT DESCRIPTION:

Location/Watershed Description: The Ferris-Meadowview project encompasses the upper 9.1 miles of the mainstem of Last Chance Creek on the far eastern edge of Plumas County and just within the eastern boundary of the Dixie Mountain Game Refuge. The principal tributaries entering the project area are Charles, Artray, Robinson, Ferris and Jordan Creeks draining from the west and Dooley and Bird Creeks draining from the east. The drainage area is approximately 44 mi² (28,000 ac.). The east watershed divide separates the Bay-Delta watershed from the Great Basin. The upland vegetation ranges from east-side mixed conifer to east-side pine and juniper/bitterbrush/sage communities. Annual precipitation varies from 30" at the western edge to 20" on the east, primarily occurring as winter snow, with occasional intense summer thunderstorms. The project elevation is from 5600' - 6000' with surrounding crests exceeding 7000'. Geologically the watershed is comprised of a mosaic of weathered granitics (Diamond Mtns) and young volcanics. The primary flood process is rain-on-snow storm events. The watershed has also been subjected to three recent, catastrophic fires, Ferris (1973), Clarks (1987) and Rack (1991).

Geomorphic Processes: The landscape was a nearly continuous meadow system of varying widths (100' - 2000') comprised of sediments deposited through fluvial action. Flattening gradient, vegetation, large woody debris (LWD) and beaver were all structural attributes contributing to meadow development. The combination of fine-grained volcanic and sandy granitic soils rich in organic matter developed into a relatively cohesive 'sponge' capable of absorbing, then releasing water throughout the year. These meadows were kept perennially moist, if not wet, by this action which maintained a continuous dense meadow sod and scattered willow community that filtered watershed sediments during floods while simultaneously slowing flood velocities.

These processes were reversed by roads that traversed, bisected or impinged on the meadow, impacts to the vegetation by season-long and/or early 20th century grazing practices, then exacerbated by changes in runoff and sediment supply from roads, fires and timber harvest activities in the uplands. The stream channel straightened, increasing the flow velocities which initiated downcutting. This further increased channel capacity and velocity, while directing erosive energy on soils below the protective root mass. The deeper and wider the channel cut, the less relief was provided by the rapidly abandoned floodplain. As the base level of the channel dropped so did the meadow water level, further weakening the protective vegetation. The weakened, de-watered floodplain and channel vegetative communities converted from late seral, deep-rooting species (sedges, rushes, willows) to bare ground and shallow-rooting early seral, or "disclimax", species (grasses, forbs, sagebrush and annuals). The floodplain and channels no longer had the structural protection to withstand fluvial peaks and overland flow.

Scope of Work: This project seeks to restore the water retention/release and sediment storage function of this meadow system by returning the channel to its original base level. The project will also identify and remediate those portions of PC Road 101 that directly impacts these functions. The FR-CRM has implemented, monitored and refined a number of techniques to achieve this result. These individual techniques are discussed below. It is anticipated that the

majority of the project area will be restored by returning streamflow to abandoned remnant or reconstructed channels and obliterating the existing gully through a series of ponds and plugs. However, other methods, such as loose rock check dams, large woody debris (LWD) jams or introduction of beaver, may be used as the landscape setting varies.

Applicant will be providing preconstruction, monitoring and management services. All public works construction anticipated in Tasks #2, 3 and 4 will be contracted through competitive, public bidding process. Only licensed contractors with proof of Liability and Workers Compensation Insurance will be selected.

Task #1: Project specific data collection, T&E species and heritage resource investigations, baseline monitoring data, design and permitting for all subsequent implementation phases will be undertaken in this task. All work will be performed by CRM staff, project partners, and/or consultants under the direction and guidance of the project Technical Advisory Committee (TAC) as well as a USFS Interdisciplinary (ID) Team. All FR-CRM projects are guided by a TAC composed of a diverse array of resource professionals, landowner/managers and other interested stakeholders. This process, from initial data collection to receipt of all permits/decisions, is expected to require 12 months (5/2000- 5/2001).

Task #2: This task will entail the channel reconstruction of the upper 5.3 miles of Last Chance Creek and its associated meadows from Jordan Flat to the Meadowview Guard Station. This work is expected, in the main, to be comprised of obliterating the existing gully with ponds and plugs while diverting steamflow into existing remnant channels. Spot treatment of remnant channels is anticipated to provide structure and vegetative protection at key stress points. Where remnants no longer exist, a channel will be constructed with the appropriate pattern, form and profile to ensure long-term function. This task is expected to require five months (6/2001- 11/2001).

Task #3: This task entails the remediation of PC Road 101. Plumas County Road 101 is located immediately adjacent to, and in several locations occupies, the Last Chance Creek meadow. This section of road is un-surfaced, a quagmire in the spring, while both impinging directly on the channel and delivering sediment directly to the channel. These sections should be re-located up-slope (heritage resources permitting), or at least elevated and gravelled. The road changes jurisdiction near the mid-point of the project and becomes USFS system road 28N03. Both road portions have identified culvert improvement opportunities. A common road crossing/stream channel conflict is the practice of installing one large culvert to accomodate all flows. This eliminates the floodplain function of allowing floodflows to move down valley on the floodplain. All flow is forced to a central point, increasing scour potential at, and downstream of the crossing, while simultaneously reating a backwater upstream which induces sediment deposition and accelerates lateral channel migration. These fluvial responses create a continual need for costly, remedial maintenance with attendant, frequent ecosystem impacts. This road remediation is expected to take two months (8/2001- 9/2001).

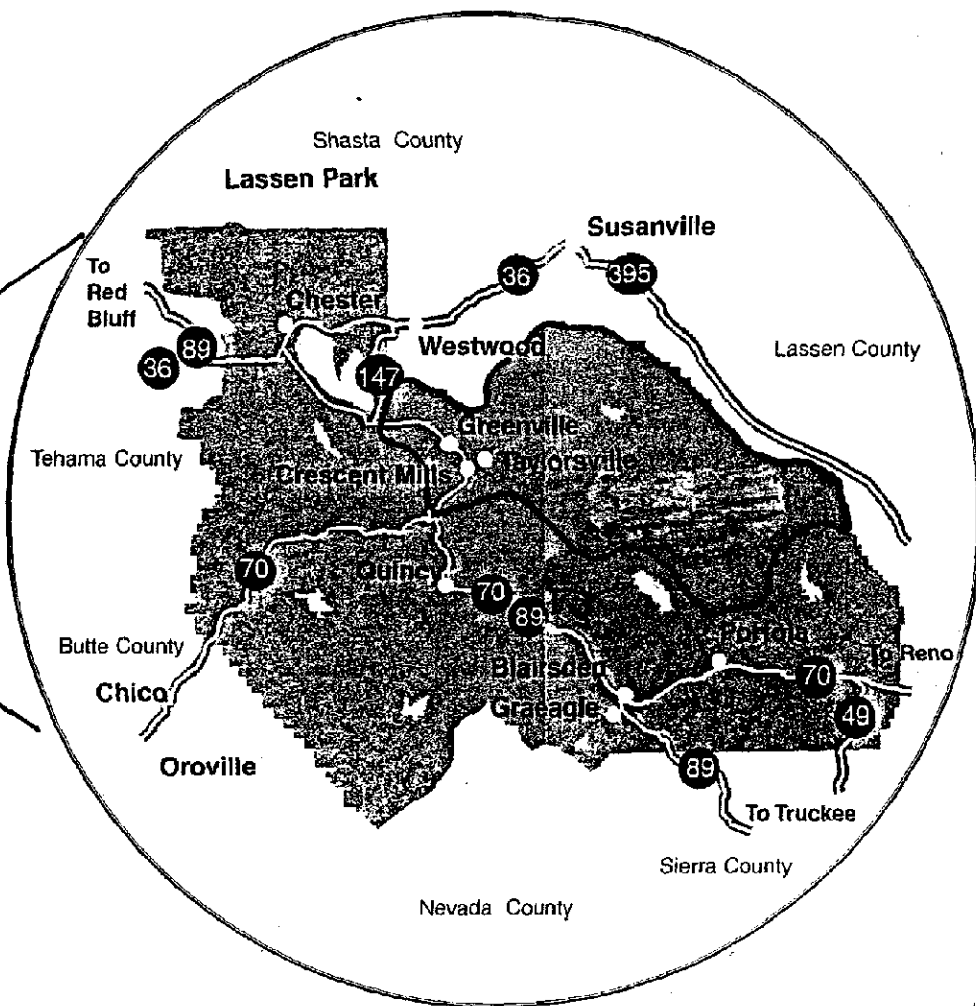
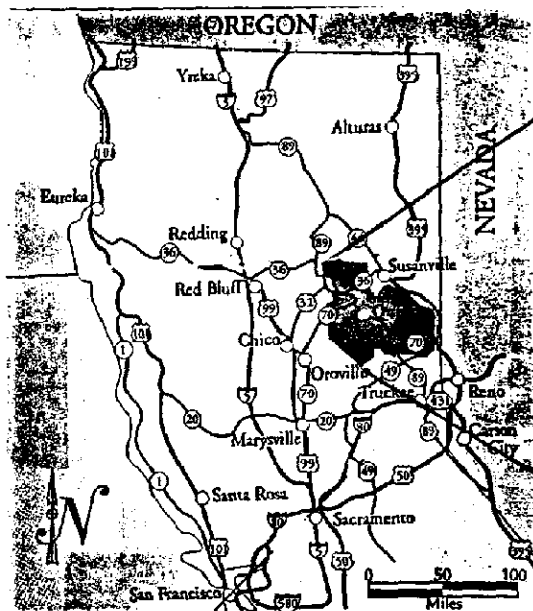
Task #4: This task will involve channel reconstruction of the lower 3.8 miles of Last Chance Creek from Jordan Flat to the low-water crossing on USFS Road 26N70 at the bottom of Ferris Meadows. This work is expected, in the main, to be comprised of obliterating the existing gully with ponds and plugs while diverting steamflow into existing remnant channels. Spot treatment of

remnant channels is anticipated to provide structure and vegetative protection at key stress points. Where remnants no longer exist, a channel will be constructed with the appropriate pattern, form and profile to ensure long-term function. This phase of the project is expected to take 5 months (6/2002- 11/2002).

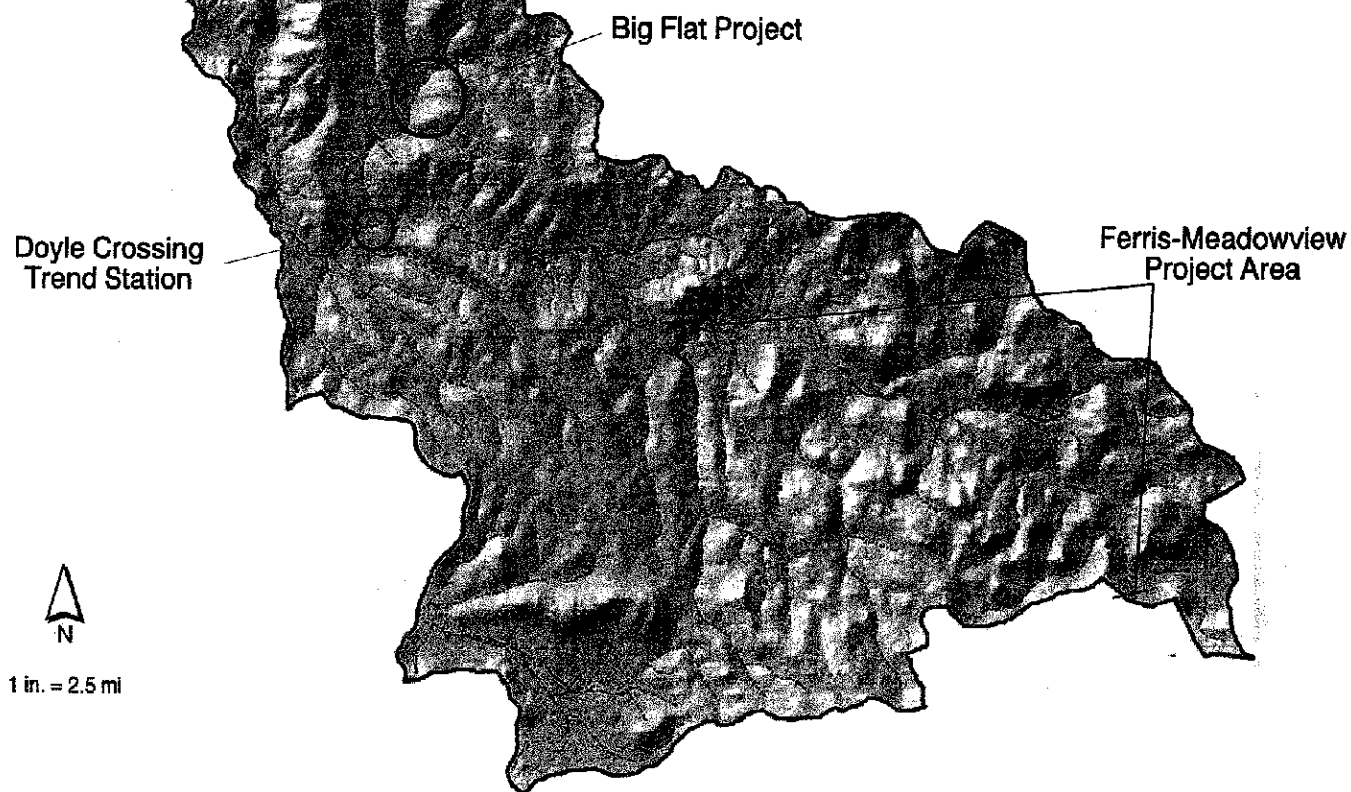
Task #5: The project monitoring will include the collection of pre-project baseline information, some of which is currently being collected through other initiatives. The remainder will be monitoring of the immediate post-project results through the spring of 2003. These will include establishment, and annual shots of overlook photo points, summer temperature monitoring at Jordan Flat and at the downstream end of the project as well as vegetation transects to monitor changes in species composition and density. If deemed appropriate by the project TAC, geotechnical probe piezometers may be installed in selected meadow sections to track changes in groundwater level and seasonal fluctuation. These monitoring wells have been installed on five (5) other FR-CRM projects, including the Big Flat, Clarks and Stone Dairy projects in the Last Chance watershed. The long-term trend monitoring station at Doyle Crossing, seven miles downstream, will also continue to be operated to track downstream effects of the project.

Task #6: Project coordination will entail preparation and submission of quarterly and final reports, organization of public meetings as well as Project TAC meetings. Applicant will also coordinate and administer consultant contracts along with work performed by the various partners. Applications for additional funding to continue project monitoring beyond the contract period will be prepared as potential funding sources (e.g. EPA/NSF) are identified.

Location and Geographic Coordinates: The project area is delineated on the attached relief and USGS 7.5 quad maps. The 7.5 quad maps are Ferris Creek and McKesick Peak. The relief map is generated from the USFS GIS database. A central geographic coordinate point located at the center of the project reach is as follows; 40° 03' 30" West, 120° 17' 30" North (NAD 1927).



Last Chance Creek Watershed

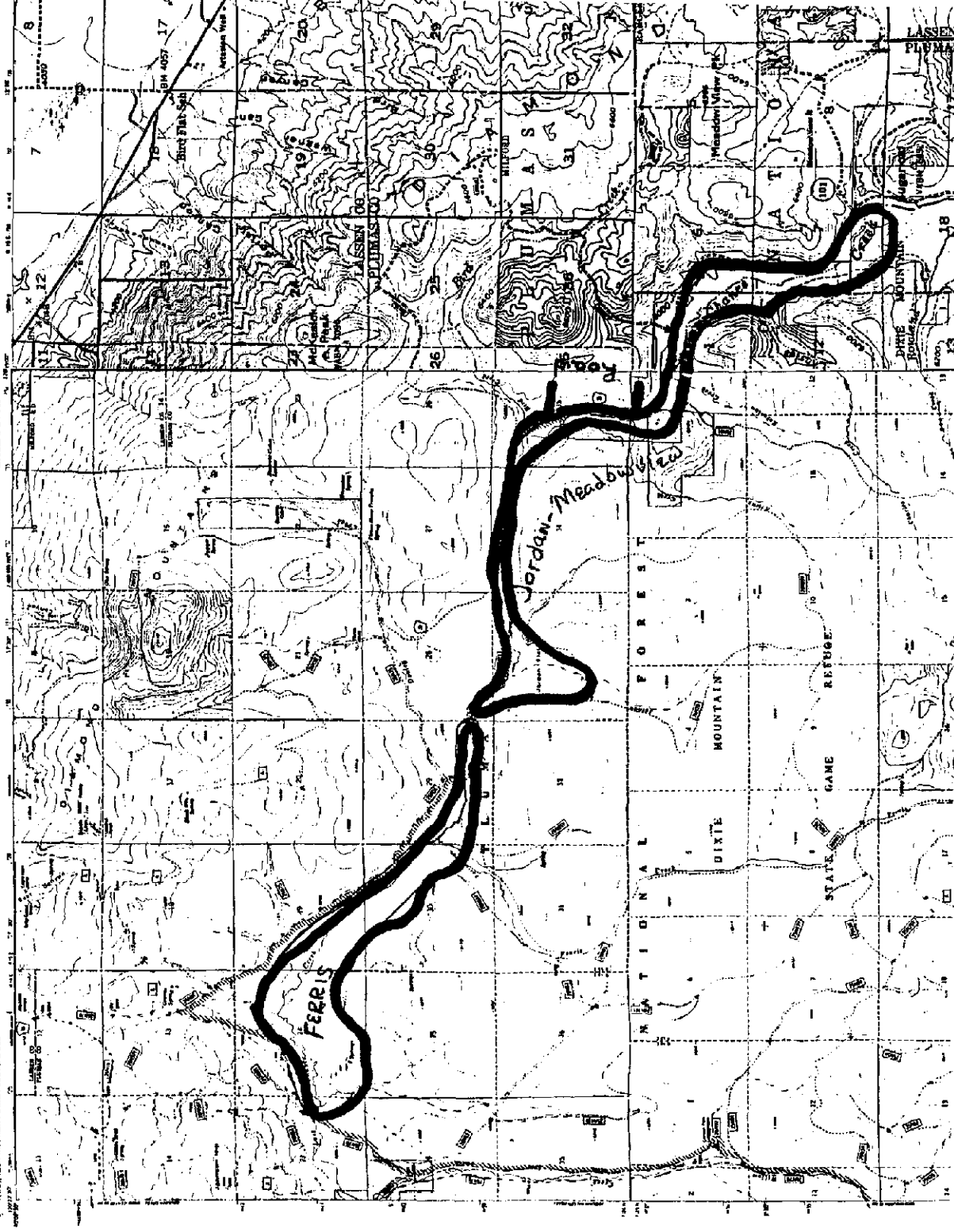


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I-016774

ANTHONY, ILL.
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
MODIFIED FOR USFS FOREST SERVICE USE

FERRIS CREEK GUARDWALL
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
MODIFIED FOR USFS FOREST SERVICE USE



I - 016775

I-016775

Biological and Ecological Benefits: Meadow re-watering projects have exhibited a suite of resource benefits. These have ranged from the physical; elevated/extended base streamflows and sediment reduction, to the biological; enhanced mesic vegetation, fishery improvement and waterfowl habitat. The primary objective of this project is to restore the hydrologic function of winter/spring water retention and subsequent summer/fall water release. Meadow rewatering in this reach will, in effect, create the site potential for the type of vegetation that will ensure long-term functioning condition. Hydric vegetation evolved to withstand the seasonal fluvial disturbances and vernal inundation that is natural to this area. The sponge-like behavior of the functioning meadow floodplain creates zones and patches of very wet to mesic ground. This patchwork and zonation of the meadow in the functioning system causes a great increase in the vegetative biodiversity, and consequently, increasing the presence and abundance of riparian dependent animal species (overall biodiversity). Re-watering of this reach is also likely to stabilize and promote the viability of two rare plant species, *Ivesia aperta* and *Ivesia sericoleuca* (USFS Region 5 Sensitive Species). The project area is the most northern occurrence of both species. Most populations of these plants are very small and patchy, found only near springs or where the watertable remains high due to underground flow. The expected changes to the hydrologic regime will beneficially impact the vigor of these populations by ameliorating drought stress which in turn will increase recruitment, vegetative vigor and reproductive output.

Cumulatively, the components of the Last Chance Creek Restoration Project, of which Jordan-Meadowview is one piece, are intended to improve the biological and ecological condition onsite as well as downstream through the Feather River and, ultimately, benefit Bay-Delta species of concern and beneficial uses by improving water quality while changing the timing of water release from the watershed. Most of the biological benefits have derived from the restored hydrology and, in the case of waterfowl, actions taken to effect the restored hydrology (creation of ponded water).

Ongoing studies (six years to-date) by San Francisco State University in the Carman Valley watershed (30 miles south of Last Chance) indicate that accelerated seasonal drying of montane meadows forces neotropical migratory birds (willow flycatcher, Orange-crowned warbler, Nashville warbler Solitary vireo, etc.) to abandon the habitat prematurely. Carman Valley is slated for a similar meadow rewatering project for summer 2001 (funded by Prop 204) and will include intensive monitoring of avifauna response to the restored hydrology. The results of monitored in Carman Valley

The CRM experience to date is that entrenched channels, disconnected from their former expansive floodplains, have required difficult, costly and high risk solutions to the upper Feather River sediment problem. Even then, the resource benefits were limited to some sediment reduction and some habitat improvement at best.

The Feather River CRM has evolved to this technology of meadow rewatering/floodplain re-connection through the performance of numerous projects including two (2) intensively monitored projects constructed ten years apart. The first, the Red Clover Creek Project (1985), involved the construction of four (4) loose rock check dams affecting one mile of channel. The second, the Big Flat/Cottonwood Creek project (1995), geomorphically stabilized its channel by reconstructing a historic channel on top of the meadow while obliterating the entrenched gully channel through the

pond and plug technique.

The Red Clover Creek Project was the FR-CRM first collaboratively developed and cooperatively implemented project. The project consisted of a series of loose rock check dams to raise the base level of a one mile section of the creek in Red Clover Valley. The objectives were to trap sediment behind the dams, reduce the on-site supply of sediment while the raised water table would foster the rejuvenation of riparian vegetation. The project was monitored intensively for ten years to document its effects on sedimentation, fisheries, wildlife, vegetation and groundwater (Red Clover Creek Research Summary, Lindquist, et.al., 1997). The report generally concludes that there has been significant entrapment of watershed sediments, both in channel and on the floodplain (the 3000' long pond above the uppermost dam was completely filled after the 1997 flood). Trout and waterfowl numbers increased 200% and 700%, respectively, while mesic (wet) meadow vegetation cover increased nearly 60%. The shallow groundwater table at the highest check dam increased 5.1 feet while seasonal fluctuations in groundwater levels were significantly reduced. Due to the size and complexity of Red Clover Valley, nearly ten miles long relative to the one mile long project area, little effort was given to document changes in peak and baseflow discharges.

The Big Flat Project was the first opportunity to fully re-connect a channel to its floodplain and restore meadow hydrology through the entire length of a meadow utilizing a geomorphic approach. As such, with funding from Pacific Gas & Electric, the FR-CRM focused its limited monitoring resources to quantifying potential changes in surface and sub-surface hydrology and streamflow. Frankly, many biologists viewed pre-project Big Flat as a biological desert with little recovery potential. As a consequence, quantitative biological monitoring, other than vegetation transects, was not conducted. Devoid of streamflow from June to December, no macro-invertebrate, fish population or regular temperature monitoring was initiated. No monitoring of waterfowl or insectivorous birds and bats. No monitoring protocol was established to quantify the sediment entrapment function of the meadow floodplain. Yet qualitative observations, at least monthly throughout the year, by project and monitoring personnel have indicated significant improvement in, or re-appearance of, these resources/functions. These are all monitoring parameters that could/should be more thoroughly quantified, if funded, in future projects of this type. All these on-site resource benefits derived from just **fully** restoring and reconnecting the channel and floodplain system to its historically evolved condition.

The above mentioned benefits are just those observed in specific project areas. The cumulative resource benefit of multiple, or even complete, meadow restoration in a watershed the size of Last Chance have the potential to extend far downstream of the actual restoration areas. The cumulative improvement in water quality from a decrease in sediment (fine silts and sands trapped in meadows) and a decrease in temperature is likely to improve macro-invertebrate populations and diversity. The same attributes should provide better spawning habitat, food supply and a greater stream mile length of suitable fishery habitat. The reduced sediment supply would also enhance channel stability and development of habitat components (pools, riffles) in downstream reaches. These improvements coupled with a higher baseflow could potential provide exponential improvements to aquatic resources, cumulatively. Higher baseflows and a reduced sediment supply may also enhance both the structural and habitat functions of riparian vegetative communities downstream through greater channel stability and higher floodplain/streambank

moisture levels during the growing season. This may be particularly important for moisture sensitive riparian species such as alder, cottonwood and some willow species.

Linkages: The successful restoration of the water retention/release and sediment storage function of headwater meadows in a number of watersheds similar to Last Chance may have significant implications for Bay-Delta species of concern and beneficial uses. The proposed project would be far and away the largest project of its type undertaken in California. The retention, and subsequent release, of a portion of the Feather River annual watershed yield from January to June could provide greater operational flexibility at Oroville Reservoir. This flexibility could affect all aspects of operations at this multi-purpose facility from maintaining optimal recreation levels, flood storage capacity, environmental flow releases and water storage.

The Last Chance Creek Project-- Ferris-Meadowview component contributes to ecosystem goals #2 and #4 as presented in the *Strategic Plan for Ecosystem Restoration*, page 1, vol. 1 of the ERPP. This project meets the Ecosystem Elements of migratory waterfowl and neotropical migratory bird guild, page 38, vol. 1, stream meander, page 45, vol. 1, natural floodplains and flood processes, page 45, vol. 1 and streamflow, constraints, upper watershed conditions, page 49, vol. 1, **Opportunities, flexibility in water release operating rules**, page 52, vol. 1, **Stage 1 Expectations: sustaining summer/fall baseflows**, page 56, vol. 1.

The project area is not under any legal obligations or agency mandates.

Compatibility with Non-Ecosystem Objectives: The proposed project would provide for a naturally functioning system that would retain water for later season, high demand releases. While Lake Oroville already provides some buffer for sediment-related water quality issues, this project along with other would improve water quality entering the reservoir and reduce the impact on the diminishing dead storage capacity of Lake Oroville. Reductions in flood peak and a delay in flood peak arrival to Lake Oroville can have a positive impact on flood release operations for the Feather River downstream of the reservoir. Similar benefits could construe to the intervening Pacific Gas & Electric hydroelectric facilities on the North Fork Feather River.

The greatest third party benefit expected would be the private landowners and USFS grazing permittees operating within the project area. Based on the vegetative response of the Red Clover and Big Flat projects, a similar 60% expansion of mesic and near-mesic vegetation in the meadows would provide higher quality and more sustainable overall livestock forage. This increase in perennial grasses, with a concurrent reduction in annuals and sagebrush, could more than offset any reduction of grazing in the immediate channel areas.

Technical Feasibility and Timing: The two realistic alternatives to the proposed project are: 1.) no action other than ongoing land management and allowing natural processes to occur. The natural processes of recovery appear to be very slow to take effect due to the severity of entrenchment and the degree of channel response still necessary to return to an aggradational and water retention function. This despite much improved grazing and upper watershed management; 2.) the above alternative plus continued implementation of piecemeal projects as opportunity and funding coincide. Several sections within the proposed project have had restoration attempted with a variety of techniques over the past six decades with varying degrees of success. The most

prevalent reason for the limited success has been the inability, often due to funding constraints, to address the channel problems over the entire channel reach affected. As an example: a check dam project is constructed on one mile of a three-mile reach of entrenched channel. The groundwater is raised in the project reach, sediment deposition is accelerated, vegetation begins to convert, but at the bottom of the project new headcutting begins to end-run the structures, reversing the newly initiated processes. However, the proposed project would begin and end treatments at existing points of natural base level control whether they are one or five miles apart, implementing a holistic, reach-long approach.

The project would occur on both private (30%) and federal (70%) land as well as a county road. This will require concurrent CEQA and NEPA permitting for the multiple jurisdictions. The project would require Army Corps of Engineers Notification for NWP 27, Regional Water Quality Control Board 401 certification, Ca. Department of Fish & Game 1603 agreement and a Plumas County grading permit before any channel or road reconstruction activities were undertaken. Cultural heritage resources are known to be very high in the area, though most frequently occurring on the lower hillslopes immediately adjacent to the project meadows. Previous projects in the Last Chance Creek watershed have been allowed to proceed with identified cultural heritage resources tagged for avoidance.

Methods/Timeline: The Feather River CRM expects to utilize a variety of restoration techniques (as outlined in the Project Description) to achieve the objective of raising the base level of Last Chance Creek. The CRM collectively, has successfully implemented large scale projects (up to 1 mile of channel length) using the individual, or combinations of, these techniques. Most materials; whole trees, rock and fill is available on-site or within a short distance from the project area. The overall project is expected to be completed over a three-year period. Assuming contract execution in the first half of year 2000, the summer and fall of 2000 would be employed in design data collection, including full channel/valley cross-sections, longitudinal profiles, bed and bar sediment analysis and road engineering surveys. Concurrently, investigations for Threatened and Endangered species, cultural resources and other CEQA and NEPA permitting requirements would be undertaken. Design development and all necessary permits/decisions would be completed by the spring of 2001.

Construction of the nine mile reach would be undertaken in 2 phases. The first phase, to be performed in the summer/fall of 2001, would entail channel reconstruction of the reach from Jordan Field upstream to Charles Creek (approximately 5 miles) as well as the relocation/rehabilitation of County Road 101. The second phase, to be performed in summer/fall 2002, would reconstruct the channel from Jordan Field downstream to the low water crossing on USFS Road 26N70 at the bottom of Ferris Field.

Second season monitoring of the Phase I (Jordan-Meadowview section) and first season of the Phase II (Ferris-Jordan section) would be conducted through winter/spring 2003 for inclusion in the Project Final Report.

Monitoring and Data Collection Methodology:

Biological/ Ecological Objectives: Restore hydrologic function, enhance meadow condition, and improve habitat value in the Last Chance Creek watershed through implementation of prescribed watershed restoration measures. Restoration approach includes both instream enhancement (biological and geomorphological), and off-site road stabilization. **Hypothesis to be tested:** Restoration of hydrologic function in Sierra Nevada montane meadows plays an important role in increasing late season flow, reducing winter peak flows, and enhancing habitat values for fish and wildlife. Questions addressed include, will restoration: enhance meadow condition; increase subsurface water storage capacity; modify the hydrograph to attenuate flood flow and increase late season flow; increase sediment retention; convert meadow vegetation to mesic species from xeric; enhance habitat values; and reduce stream temperature. Preliminary results will help justify, if warranted, additional, long-term studies on the importance of mountain meadows in modifying the magnitude and duration of flows. Study results will also begin to address the implications of meadow restoration as an alternative to downstream water storage development.

Monitoring Parameters and Data Collection Approach: The Project evaluation will be based on pre- and post-project monitoring of stream temperature, floodplain vegetation response, visual landscape changes, groundwater response, ongoing reference reach data provided by DWR, and water flow and temperature data from the existing Doyle Crossing permanent monitoring station. Parameters were selected based on ability to meet objectives, obtain preliminary results by the end of the contract period, and capitalize on synergies with other ongoing monitoring programs. Monitoring is expected to continue beyond the duration of this contract to provide a database of long-term restoration effects. FRCRM staff, signatory agency technicians, consultants, students and community members will conduct monitoring. Data collected will be integrated with current monitoring conducted by the Forest Service, DWR, PG&E, the FRCRM and others. In addition, a number of research initiatives are actively being pursued (NSF/ EPA and River Network grants) that compliment this proposed work.

Data Evaluation Approach: Sampling frequency will vary by parameter (Table 2). Data will be recorded and downloaded into a GIS database (ArcInfo), which will be stored and analyzed by Plumas Corporation. Database architecture will be based on data files and input from the Forest Service, DWR, and Information Center for the Environment (ICE). Data will be made available to the public via the FRCRM website. Project methodology, implementation and evaluation will be peer reviewed by the FRCRM TAC and selected academic reviewers. Data will be evaluated statistically based on the Plumas National Forest Stream Condition Inventory (SCI) Protocol, which provides opportunities for synergies with the Forest Service's extensive spatially referenced database.

This proposal includes funding for the continuation of flow and water temperature data collection at Doyle Crossing, strategically located at the lower end of the proposed project. This will provide continuous flow data needed to assess the effect of upstream meadow enhancement on discharge. Monitoring at DWR's seven reference reaches will be a cost share activity provided by DWR through the course of this contract. Sampling variables include flow, channel cross sections, photopoints, fish and macroinvertebrate sampling, and physical water quality (DO, pH, EC, temp, alkalinity and turbidity).

Table 2. Monitoring and Data Collection Information*

Biological/Ecological Objectives					
Hypothesis/ Questions to be Evaluated: Effects of the Project on:	Monitoring Parameters and Data Collection Approach	Type of Equipment and Location	Sampling Frequency	Data Evaluation Approach**	Comments
Meadow Condition and Hydrologic Function	Surface Flow: continuous sensor/ data logger installed with two years baseline data	Flow data logger: Doyle Crossing and DWR sampling at 7 Reference Reaches	Download data monthly: annual DWR sampling	Compare seasonal and yearly flow variation before & after restoration: rate of aquifer recharge.	Flow sampling below project to show long distance effect
	Groundwater Storage piezometers (wells) to measure water table elevation	Galvanized pipe wells: transects in vicinity of project on permanent cross sections	Monthly sampling	Show changes in base depth to water and change in seasonal fluctuation before & after restoration	Quantify changes in meadow aquifer function
	Sediment Retention Substrate analysis	DWR Reference Reaches: measure particle size distribution	Annual sampling	Use particle size distribution change as an indirect measure of sediment retention	Effect of road rehab and meadow restoration
	Water and Air Temperature Hobo sensors	4 pairs of Hobo sensors within Project area; also continuous sensor at Doyle Crossing	Continuous sampling; pick up logger end of season	Show changes in water and air temperature within and below the project area	Increasing subsurface storage will decrease water temp; fish benefits
Habitat Values	Vegetation Community Species composition sampling	Transects in representative reaches within Project area	Annual: summer, when plants in bloom	Show changes from xeric to mesic plant community	
	DWR Reference Reaches	Transects on 7 reaches. Flow, substrate, cross sections, photos, fish, macroinvertebrates, and water quality	Annual: summer, low flow	Analysis done by DWR. Integrate findings with Project data to address sediment and water quality.	Provides physical and biological trend data
	Visual Landscape Assessment	15 permanent photomonitoring stations	Annual: August (dry season)	Show overall visual changes at a landscape scale	Visual representation of effects on meadow condition and habitat values

* The Technical Advisory Committee (TAC) will finalize specific monitoring protocols.

** Statistical analysis for all parameters is based on the US Forest Service Stream Condition Inventory Protocol (SCI).

Local Involvement: The Last Chance Creek Project—Ferris-Meadowview Reach has strong support among the signatory entities (listed below) of the Feather River CRM as well as the USFS- Plumas National Forest (land manager), John & Corinne Matley (landowners) and Plumas County (road) as indicated by the attached letters. This project is also compatible with the watershed restoration goals of the Herger-Feinstein Quincy Library Group Forest Recovery Act of 1998.

All affected parties will be members of the project TAC to ensure that the design development/decision making process incorporates all parties' goals and objectives are addressed by the project. Two (2) public meetings will be held; one in eastern Plumas County, the other in the Indian Valley area (downstream of the project). Continued outreach and information updates will be made to the Milford Grazing Association, the Quincy Library Group and other interested parties.

There are no foreseen adverse impacts to on-site or downstream resources beyond the unlikely event of complete project failure and resultant return to its existing condition. To date, similar projects have not shown that trend. Potential third-party impacts may be 1.) changes in grazing management schedules to allow full vegetative recovery for the project areas; 2.) closure/obliteration of short spur roads adjacent to the project areas. These issues will be cooperatively addressed with landowners/users through the CRM process. Please see attached letters of support from landowners/managers.

Feather River Coordinated Resource Management Signatories

Federal:

Plumas National Forest, USFS/USDA
Natural Resource Conservation Service, USDA
North Cal-Neva Resource Conservation and Development Area
U.S. Army Corps of Engineers
Consolidated Farm Services Agency, USDA
U.S. Fish and Wildlife Service

State:

Department of Fish and Game	Department of Forestry and Fire Protection
Department of Parks and Recreation	Department of Transportation
Department of Water Resources	Reg. Water Quality Control Board-Central Valley
University of California Cooperative Extension	

Local:

Plumas County	Plumas County Community Development Commission
Plumas Unified School District	Feather River Resource Conservation District
Feather River College	

Private:

Pacific Gas & Electric	Salmonid Restoration Federation
Plumas Corporation	

Project Budget by Task

<u>Project Task/Description</u>	<u>Requested Amount</u>	<u>Match Amount</u>
Task #1- Data collection, CEQA/NEPA/Permits	\$ 90,000.00	\$ 20,000.00
Task #2- Phase I--- Jordan-Meadowview Reach	\$255,000.00	\$ 60,000.00
Task #3- Plumas Co. Rd. 101 Rehabilitation	\$140,000.00	\$ 70,000.00
Task # 4-Phase II--- Ferris-Jordan Reach	\$355,000.00	\$ 60,000.00
Task # 5- Monitoring	\$ 80,000.00	\$ 28,000.00
Task #6- Project Administration	\$ 60,000.00	\$ 20,000.00
Project Total	\$980,000.00	\$258,000.00**

****Match Amounts are estimated in-kind and materials contributions from project partners.**

Project Budget by Line Item

<u>Task</u>	<u>Hours/Salary/Ben.</u>	<u>Serv. Contracts</u>	<u>Materials</u>	<u>Misc.</u>	<u>Over.</u>	<u>Total</u>
Task #1	1000 /\$40K	\$40K	\$5K	\$3K	\$2K	\$90K
Task #2	900 /\$36K	\$210K	\$5K	\$2K	\$2K	\$255K
Task #3	350 /\$14K	\$120K	\$2K	\$2K	\$2K	\$140K
Task #4	1000 /\$40K	\$305K	\$5K	\$3K	\$2K	\$355K
Task #5	1250 /\$50K	\$20K	\$6K	\$2K	\$2K	\$80K
Task #6	1250 /\$50K	\$ -0-	\$4K	\$4K	\$2K	\$60K
Item Total	5750 /\$230K	\$695K	\$27K	\$16K	\$12K	\$980K

Project Budget by Quarter

<u>Quarter</u>	<u>Task #1</u>	<u>Task #2</u>	<u>Task #3</u>	<u>Task #4</u>	<u>Task #5</u>	<u>Task #6</u>
10-12/99	\$ -0-	\$ -0-	\$ -0-	\$ -0-	\$ -0-	\$ -0-
1-3/00	\$ -0-	\$ -0-	\$ -0-	\$ -0-	\$ -0-	\$ -0-
4-6/00	\$ 25K	\$ -0-	\$ -0-	\$ -0-	\$ 5K	\$ 4K
7-9/00	\$ 25K	\$ -0-	\$ -0-	\$ -0-	\$ 5K	\$ 4K
10-12/00	\$ 20K	\$ -0-	\$ -0-	\$ -0-	\$ 5K	\$ 6K
1-3/01	\$ 15K	\$ -0-	\$ -0-	\$ -0-	\$ 5K	\$ 6K
4-6/01	\$ 5K	\$ -0-	\$ -0-	\$ -0-	\$ 5K	\$ 6K
7-9/01	\$ -0-	\$200K	\$ -0-	\$ -0-	\$ 5K	\$ 4K
10-12/01	\$ -0-	\$ 55K	\$140K	\$ -0-	\$ 5K	\$ 4K
1-3/02	\$ -0-	\$ -0-	\$ -0-	\$ -0-	\$ 5K	\$ 4K
4-6/02	\$ -0-	\$ -0-	\$ -0-	\$ -0-	\$ 5K	\$ 4K
7-9/02	\$ -0-	\$ -0-	\$ -0-	\$250K	\$ 10K	\$ 4K
10-12/02	\$ -0-	\$ -0-	\$ -0-	\$105K	\$ 10K	\$ 4K
1-3/03	\$ -0-	\$ -0-	\$ -0-	\$ -0-	\$ 5K	\$ 4K
3-6/03	\$ -0-	\$ -0-	\$ -0-	\$ -0-	\$ 10K	\$ 6K
Total	\$ 90K	\$255K	\$140K	\$355K	\$ 80K	\$ 60K

Cost Sharing: The Feather River CRM has historically implemented projects with multiple funding, in-kind technical and material contributions. This has allowed for stakeholders and partners to participate in a variety of creative avenues as well as spreading the project investment burden. CRM staff will continue to seek additional cost-sharing contributors to this project.

Currently, match funding listed in the Project Budget is anticipated through a portion of the Department of Water Resources annual technical assistance to the FR-CRM for monitoring and engineering services. Materials (rock, wood material) and technical assistance would be provided by the Plumas National Forest. Monitoring funded by a current SWRCB 319(h) contract will also be included as match.

Applicant Qualifications: Plumas Corporation is a 501(c)(3), private non-profit organization registered with the State of California. Plumas Corporation has provided staff to the Feather River CRM since 1987. The Feather River CRM has successfully implemented over 40 studies and restoration projects since 1985 totaling over \$6,000,000.

CRM staff generally work under the direction of the CRM Management Committee (see attached FR-CRM organizational chart) which meets monthly for this purpose. Projects are accepted by the CRM Steering Committee and then referred to the Management Committee for direction and oversight. Direct project development is overseen and guided by a Project Technical Advisory Committee (TAC) consisting of resource professionals, landowners/managers and other interested stakeholders necessary to ensure a well-developed, cooperatively-implemented project agreed to by all parties. TAC representatives report back to the Management Committee as well as the larger CRM Steering Committee at regular intervals.

There are no known potential conflicts of interest.

Feather River CRM staff at Plumas Corporation currently consists of:

CRM Program Coordinator-Jim Wilcox (interim)
CRM Project Manager- Jim Wilcox
CRM Monitoring Coordinator- Donna Lindquist

Jim Wilcox- Jim Wilcox, a 23 year resident of Plumas County, has been CRM Project Manager since 1990, primarily responsible for development and implementation of 15 geomorphic stream channel restoration projects. Wilcox has also served as interim CRM Program Coordinator since 1996. Wilcox will serve as staff lead in data collection, design and construction of the channel/meadow restoration project as well as administration of the project.

Donna Lindquist- Donna Lindquist has been CRM Monitoring Coordinator since 1998 primarily responsible for coordinating, developing and implementing watershed-wide and project monitoring activities. Previously, Donna worked for Pacific Gas & Electric for 15 years as a Research Scientist in the Research & Development Department. She managed a \$5M Research Program for the Hydro Generation Department

which included watershed management, instream flow, fisheries and hydrologic modeling, range management and erosion control.

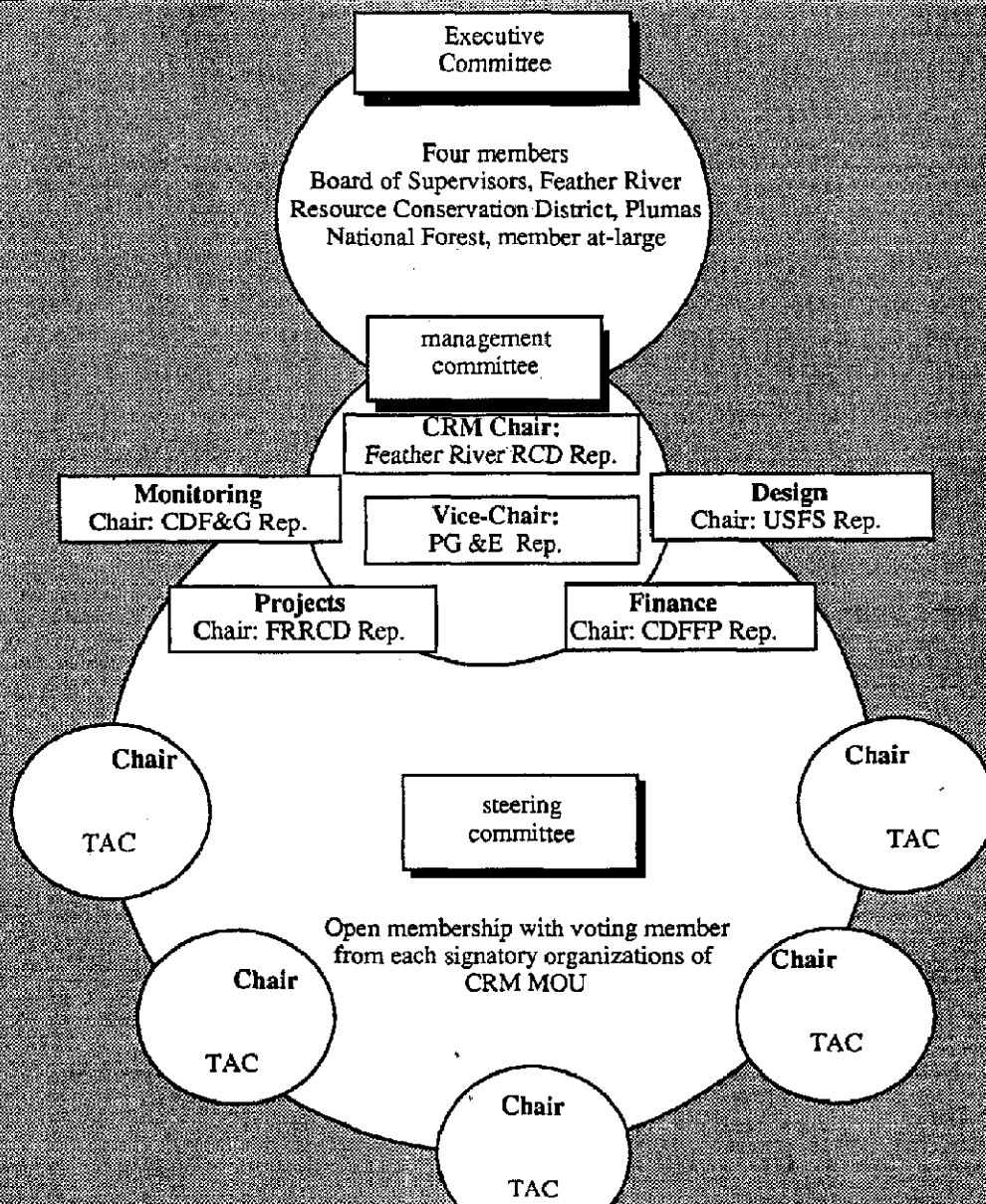
Plumas Corporation staff involved with contract/financial administration:

Plumas Corporation Executive Director- John Sheehan
Plumas Corporation Administration Assistant- Valerie Nellor

John Sheehan- Mr. Sheehan has been the Executive Director of Plumas Corporation since 1992 and has overall responsibility for contract administration and compliance for Plumas Corporation. Previously, John was Executive Director for the Plumas County Community Development Commission for 8 years and in that role was instrumental in the formation and development of the FR-CRM.

Valerie Nellor- Ms. Nellor has been the Agency Administration Assistant since 1990 with responsibility for invoicing, financial tracking and contract compliance.

Feather River Coordinated Resource Management (CRM)



TAC: Technical Assistance Committees for projects & studies
CDF&G: California Dept. of Fish and Game
USFS: United States Forest Service
CDFFP: Calif. Dept. of Forestry & Fire Protection
FRRCD: Feather River Resource Conservation District

October 1994

APPLICATION FOR FEDERAL ASSISTANCE

OMB Approval No. 0348-0043

1. TYPE OF SUBMISSION:

Application

☐ Construction

☐ Non-Construction

Preapplication

☒ Construction

☒ Non-Construction

2. DATE SUBMITTED

April 14, 1999

3. DATE RECEIVED BY STATE

4. DATE RECEIVED BY FEDERAL AGENCY

Applicant Identifier

State Application Identifier

Federal Identifier

5. APPLICANT INFORMATION

Legal Name:

Plumas Corporation

Address (give city, county, State, and zip code):

Organizational Unit:

Private non-profit

Name and telephone number of person to be contacted on matters involving this application (give area code)

Jim Wilcox 530-283-3739

6. EMPLOYER IDENTIFICATION NUMBER (EIN):

68-0016418

8. TYPE OF APPLICATION:

☒ New

☐ Continuation

☐ Revision

If Revision, enter appropriate letter(s) in box(es)

A. Increase Award

B. Decrease Award

C. Increase Duration

D. Decrease Duration Other (specify):

7. TYPE OF APPLICANT: (enter appropriate letter in box)

A. State

H. Independent School Dist.

B. County

I. State Controlled Institution of Higher Learning

C. Municipal

J. Private University

D. Township

K. Indian Tribe

E. Interstate

L. Individual

F. Intermunicipal

M. Profit Organization

G. Special District

N. Other (Specify) non-profit 501(c)

9. NAME OF FEDERAL AGENCY:

State or National Fish & Wildlife Foundation (CALFED)

10. CATALOG OF FEDERAL DOMESTIC ASSISTANCE NUMBER:

unknown -

TITLE: CALFED Bay Delta Program

12. AREAS AFFECTED BY PROJECT (Cities, Counties, States, etc.):

Plumas County, California

11. DESCRIPTIVE TITLE OF APPLICANT'S PROJECT:

Last Chance Creek Watershed Restoration Project-Ferris Meadowview Reach Feather River Coordinated Resources Management Plumas Corporation

13. PROPOSED PROJECT

Start Date

5/00

Ending Date

6/03

14. CONGRESSIONAL DISTRICTS OF:

District #2 Walley Herger

a. Applicant

Plumas Corporation

b. Project

Last Chance Creek Project

15. ESTIMATED FUNDING:

a. Federal

\$

980,000.00

b. Applicant

\$

c. State

\$

d. Local

\$

258,000.00

e. Other

\$

f. Program Income

\$

g. TOTAL

\$

1,238,000.00

16. IS APPLICATION SUBJECT TO REVIEW BY STATE EXECUTIVE ORDER 12372 PROCESS?

a. YES. THIS PREAPPLICATION/APPLICATION WAS MADE AVAILABLE TO THE STATE EXECUTIVE ORDER 12372 PROCESS FOR REVIEW ON:

DATE

b. No. ☒ PROGRAM IS NOT COVERED BY E. O. 12372
☐ OR PROGRAM HAS NOT BEEN SELECTED BY STATE FOR REVIEW

17. IS THE APPLICANT DELINQUENT ON ANY FEDERAL DEBT?

☐ Yes If "Yes," attach an explanation.

☒ No

18. TO THE BEST OF MY KNOWLEDGE AND BELIEF, ALL DATA IN THIS APPLICATION/PREAPPLICATION ARE TRUE AND CORRECT, THE DOCUMENT HAS BEEN DULY AUTHORIZED BY THE GOVERNING BODY OF THE APPLICANT AND THE APPLICANT WILL COMPLY WITH THE ATTACHED ASSURANCES IF THE ASSISTANCE IS AWARDED.

a. Type Name of Authorized Representative

John Sheehan

b. Title

Executive Director

c. Telephone Number

530-283-3739

d. Signature of Authorized Representative

e. Date Signed

4/14/99

Previous Edition Usable

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Standard Form 424 (Rev. 7-97)
Prescribed by OMB Circular A-102

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I-016787

PART E: Certification Regarding Lobbying
Certification for Contracts, Grants, Loans, and Cooperative Agreements

CHECK IF CERTIFICATION IS FOR THE AWARD OF ANY OF THE FOLLOWING AND THE AMOUNT EXCEEDS \$100,000: A FEDERAL GRANT OR COOPERATIVE AGREEMENT, SUBCONTRACT, OR SUBGRANT UNDER THE GRANT OR COOPERATIVE AGREEMENT.

CHECK IF CERTIFICATION IS FOR THE AWARD OF A FEDERAL LOAN EXCEEDING THE AMOUNT OF \$150,000, OR A SUBGRANT OR SUBCONTRACT EXCEEDING \$100,000, UNDER THE LOAN.

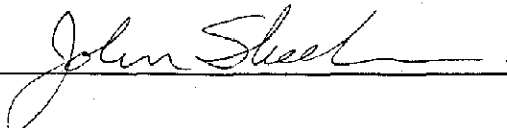
The undersigned certifies, to the best of his or her knowledge and belief, that:

- (1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, and officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
- (2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.
- (3) The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by Section 1352, title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

As the authorized certifying official, I hereby certify that the above specified certifications are true.

SIGNATURE OF AUTHORIZED CERTIFYING OFFICIAL



TYPED NAME AND TITLE John Sheehan, Executive Director

DATE April 14, 1999

ACORD

CERTIFICATE OF PROPERTY INSURANCE

GE B3
PROMCODATE (MM/DD/YY)
04/14/99

PRODUCER

MURRAY & EDWARDS INSURANCE ACY
BOX 3556, 400 WEST MAIN ST
QUINCY CA 95971-Murray & Edwards Insurance
520-283-1112

INSURED

Plumas Corporation
P.O. Box 3888
Quincy CA 95971THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION
ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE
HOLDER. THIS CERTIFICATE DOES NOT AMEND, EXTEND OR
ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW.

COMPANIES AFFORDING COVERAGE

COMPANY A	Fidelity & Deposit Company
COMPANY B	
COMPANY C	
COMPANY D	

COVERAGES

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD
INDICATED, NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS
CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS,
EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

CO LTR	TYPE OF INSURANCE	POLICY NUMBER	POLICY EFFECTIVE DATE (MM/DD/YY)	POLICY EXPIRATION DATE (MM/DD/YY)	COVERED PROPERTY	LIMITS
	PROPERTY				BUILDING	\$
	CAUSES OF LOSS				PERSONAL PROPERTY	\$
	BASIC				BUSINESS INCOME	\$
	BROAD				EXTRA EXPENSE	\$
	SPECIAL				BLANKET BUILDING	\$
	EARTHQUAKE				BLANKET PERS PROP	\$
	FLOOD				BLANKET BLDG & PP	\$
						\$
						\$
	INLAND MARINE					\$
	TYPE OF POLICY					\$
	CAUSES OF LOSS					\$
	NAMED PERILS					\$
	OTHER					\$
A	X CRIME	30486579	07/01/98	07/01/99	EMPLOYEE DISHONESTY	\$25,000
	TYPE OF POLICY					\$
	FIDELITY BOND FORM A					\$
	BOILER & MACHINERY					\$
						\$
	OTHER					

LOCATION OF PREMISES/DESCRIPTION OF PROPERTY

SPECIAL CONDITIONS/OTHER COVERAGES

CERTIFICATE HOLDER

CALFEDB

CALFED BAY-DELTA PROGRAM
1416 NINTH STREET, SUITE 1155
SACRAMENTO CA 95814

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE
EXPIRATION DATE THEREOF, THE ISSUING COMPANY WILL ENDEAVOR TO MAIL
10 DAYS WRITTEN NOTICE TO THE CERTIFICATE HOLDER NAMED TO THE LEFT.
BUT FAILURE TO MAIL SUCH NOTICE SHALL IMPOSE NO OBLIGATION OR LIABILITY
OF ANY KIND UPON THE COMPANY, ITS AGENTS OR REPRESENTATIVES.

AUTHORIZED REPRESENTATIVE

Murray & Edwards Insurance

ACORD 24 (1/95)

ACORD CORPORATION 1995

I - 0 1 6 7 8 9

I-016789

NONDISCRIMINATION COMPLIANCE STATEMENT

STD. 19 (REV. 3-95) FMC

COMPANY NAME

Plumas Corporation

The company named above (hereinafter referred to as "prospective contractor") hereby certifies, unless specifically exempted, compliance with Government Code Section 12990 (a-f) and California Code of Regulations, Title 2, Division 4, Chapter 5 in matters relating to reporting requirements and the development, implementation and maintenance of a Nondiscrimination Program. Prospective contractor agrees not to unlawfully discriminate, harass or allow harassment against any employee or applicant for employment because of sex, race, color, ancestry, religious creed, national origin, disability (including HIV and AIDS), medical condition (cancer), age, marital status, denial of family and medical care leave and denial of pregnancy disability leave.

CERTIFICATION

I, the official named below, hereby swear that I am duly authorized to legally bind the prospective contractor to the above described certification. I am fully aware that this certification, executed on the date and in the county below, is made under penalty of perjury under the laws of the State of California.

OFFICIAL'S NAME

John Sheehan

DATE EXECUTED

April 14, 1999

EXECUTED IN THE COUNTY OF

Plumas

PROSPECTIVE CONTRACTOR'S SIGNATURE

PROSPECTIVE CONTRACTOR'S TITLE

Executive Director

PROSPECTIVE CONTRACTOR'S LEGAL BUSINESS NAME

Plumas Corporation

U.S. Department of the Interior

**Certifications Regarding Debarment, Suspension and
Other Responsibility Matters, Drug-Free Workplace
Requirements and Lobbying**

Persons signing this form should refer to the regulations referenced below for complete instructions:

Certification Regarding Debarment, Suspension, and Other Responsibility Matters - Primary Covered Transactions - The prospective primary participant further agrees by submitting this proposal that it will include the clause titled, "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion - Lower Tier Covered Transaction," provided by the department or agency entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions. See below for language to be used; use this form for certification and sign; or use Department of the Interior Form 1954 (DI-1954). (See Appendix A of Subpart D of 43 CFR Part 12.)

Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion - Lower Tier Covered Transactions - (See Appendix B of Subpart D of 43 CFR Part 12.)

Certification Regarding Drug-Free Workplace Requirements - Alternate I. (Grantees Other Than Individuals) and Alternate II. (Grantees Who are Individuals) - (See Appendix C of Subpart D of 43 CFR Part 12)

Signature on this form provides for compliance with certification requirements under 43 CFR Parts 12 and 18. The certifications shall be treated as a material representation of fact upon which reliance will be placed when the Department of the Interior determines to award the covered transaction, grant, cooperative agreement or loan.

**PART A: Certification Regarding Debarment, Suspension, and Other Responsibility Matters -
Primary Covered Transactions**

CHECK ☒ IF THIS CERTIFICATION IS FOR A PRIMARY COVERED TRANSACTION AND IS APPLICABLE.

- (1) The prospective primary participant certifies to the best of its knowledge and belief, that it and its principals:
 - (a) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;
 - (b) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
 - (c) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (1)(b) of this certification; and
 - (d) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.
- (2) Where the prospective primary participant is unable to certify to any of the statements in this certification such prospective participant shall attach an explanation to this proposal.

**PART B: Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion -
Lower Tier Covered Transactions**

CHECK ☐ IF THIS CERTIFICATION IS FOR A LOWER TIER COVERED TRANSACTION AND IS APPLICABLE.

- (1) The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.
- (2) Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

DI-2018
March 1985
(This form consolidates DI-1952, DI-1954,
DI-1955, DI-1956 and DI-1983)

PART C: Certification Regarding Drug-Free Workplace Requirements

CHECK ☒ IF THIS CERTIFICATION IS FOR AN APPLICANT WHO IS NOT AN INDIVIDUAL.

Alternate I. (Grantees Other Than Individuals)

A. The grantee certifies that it will or continue to provide a drug-free workplace by:

- (a) Publishing a statement notifying employees that the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance is prohibited in the grantee's workplace and specifying the actions that will be taken against employees for violation of such prohibition;
- (b) Establishing an ongoing drug-free awareness program to inform employees about--
 - (1) The dangers of drug abuse in the workplace;
 - (2) The grantee's policy of maintaining a drug-free workplace;
 - (3) Any available drug counseling, rehabilitation, and employee assistance programs; and
 - (4) The penalties that may be imposed upon employees for drug abuse violations occurring in the workplace;
- (c) Making it a requirement that each employee to be engaged in the performance of the grant be given a copy of the statement required by paragraph (a);
- (d) Notifying the employee in the statement required by paragraph (a) that, as a condition of employment under the grant, the employee will --
 - (1) Abide by the terms of the statement; and
 - (2) Notify the employer in writing of his or her conviction for a violation of a criminal drug statute occurring in the workplace no later than five calendar days after such conviction;
- (e) Notifying the agency in writing, within ten calendar days after receiving notice under subparagraph (d)(2) from an employee or otherwise receiving actual notice of such conviction. Employers of convicted employees must provide notice, including position title, to every grant officer on whose grant activity the convicted employee was working, unless the Federal agency has designated a central point for the receipt of such notices. Notice shall include the identification numbers(s) of each affected grant;
- (f) Taking one of the following actions, within 30 calendar days of receiving notice under subparagraph (d)(2), with respect to any employee who is so convicted --
 - (1) Taking appropriate personnel action against such an employee, up to and including termination, consistent with the requirements of the Rehabilitation Act of 1973, as amended; or
 - (2) Requiring such employee to participate satisfactorily in a drug abuse assistance or rehabilitation program approved for such purposes by a Federal, State, or local health, law enforcement, or other appropriate agency;
- (g) Making a good faith effort to continue to maintain a drug-free workplace through implementation of paragraphs (a) (b), (c), (d), (e) and (f).

B. The grantee may insert in the space provided below the site(s) for the performance of work done in connection with the specific grant:

Place of Performance (Street address, city, county, state, zip code)
550 Crescent St. Plumas County, California 95971

Check ☐ if there are workplaces on file that are not identified here.

PART D: Certification Regarding Drug-Free Workplace Requirements

CHECK ☐ IF THIS CERTIFICATION IS FOR AN APPLICANT WHO IS AN INDIVIDUAL.

Alternate II. (Grantees Who Are Individuals)

- (a) The grantee certifies that, as a condition of the grant, he or she will not engage in the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance in conducting any activity with the grant;
- (b) If convicted of a criminal drug offense resulting from a violation occurring during the conduct of any grant activity, he or she will report the conviction, in writing, within 10 calendar days of the conviction, to the grant officer or other designee, unless the Federal agency designates a central point for the receipt of such notices. When notice is made to such a central point, it shall include the identification number(s) of each affected grant.

John Matley and Son
428795 Constantia Rd.
Doyle Ca 96109

Jim Wilcox
Plumas Corporation

Re: CALFED category III proposal

Dear Jim,

As you know we have been interested for some time, in some sort of stream rehab work on a stretch of Last Chance Creek. This project may address this and more.

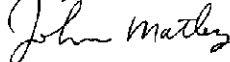
A number of times in the past, we have suggested to the Forest Service that a simple road realignment on higher ground and away from the creek, would go far in healing stream banks.

Our situation changes yearly now, as we try to keep up with increasing demands to manage for different factors when grazing on adjoining Federal lands. Often the only way to satisfy new requirements is to take up the slack by shifting to our private land portion.

Our livelihood depends upon grazing our cattle on this range and it looks nearly impossible now, to remove or rest a part of our vital grazing area.

We are unsure what this project proposes and welcome the opportunity to meet with you on the ground. If the road change mentioned above were accomplished, there would then be room for a fence between the stream and the road. A riparian pasture could possibly be created and managed to allow bank restoration to proceed rapidly. This small part of what looks like an extensive project, is still of interest to us. Any further work involving our private land can be discussed on the ground as well as the ramifications such undertakings may have on our operation.

Sincerely,



John Matley and Son

DEPARTMENT OF PUBLIC WORKS

1834 EAST MAIN, QUINCY, CA 95971-9795 PHONE (530) 283-6268 FAX (530) 283-6323



April 6, 1999

Feather River Coordinated Resource Management Council
PO Box 3880
Quincy, CA 95971

Attn: Jim Wilcox

TOM HUNTER
DIRECTOR

RICHARD HUMPHREY
DEPUTY DIRECTOR

MARTIN BYRNE
ASST. DIRECTOR

Dear Jim,

We have received the FR-CRM's proposal (executive summary) regarding the restoration of the upper Last Chance Creek watershed, specifically the Ferris-Meadowview reach. The Public Works Department has reviewed your request for the improvement (as part of your application for CALFED Bay Delta Program funding) of an approximate 1 mile length of our County Road 101, the Plinco Mine Road. This proposal would either relocate the road up slope to reduce its impact on the meadow, or raise the road in place to reduce springtime mud problems. The Plinco Mine Road is relatively lightly used, being in a remote northeasterly location of Plumas County, and historically receives only periodic grading/maintenance.

As a member of the resource management group, the Plumas County Department of Public Works is supportive of the goals of this project, i.e. improvement of water retention/release and sediment storage as well as the restoration of upper watershed meadows necessary to fulfill these goals. Improvement of the 1 mile stretch of Plinco Mine Road as part of the CALFED project is therefore conceptually approved. We would appreciate being asked to provide some input toward final design and construction decisions. An encroachment permit will be required when final design is to be implemented.

Please feel free to call me if you have any questions.

Sincerely,

Tom Hunter, Director

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United States
Department of
Agriculture

Forest
Service

Plumas
National
Forest

Beckwourth Ranger District
P.O. Box 7, 23 Mohawk Road
Blairsden, CA 96103
(530) 836-2575

File Code: 2520

Date: April 12, 1999

Mr. Jim Wilcox
Coordinator, Feather River CRM
Plumas Corporation
P.O. Box 3880
Quincy, CA 95971

Dear Jim,

I am writing to thank you for submitting the Ferris-Meadowview component of the Last Chance Creek Watershed Restoration Project as a CalFed proposal.

As you know, Beckwourth Ranger District has started a Landscape Assessment of the Last Chance watershed, we expect to complete this analysis by the end of 1999. I know that stream and meadow restoration projects will be identified in our analysis as some of the highest priority management opportunities in this severely damaged watershed.

The Ferris-Meadowview project will be a major component of the continuing restoration efforts which the Feather River CRM and the Plumas National Forest have jointly conducted in the Last Chance Creek watershed. As the Line Officer responsible for this district of the Plumas National Forest, I am pleased that you are seeking funding for this important project.

Please feel free to call me at any time if I can be of help in getting this project started.

Sincerely,

KATHRYN AXTON
District Ranger



Caring for the Land and Serving People

Printed on Recycled Paper

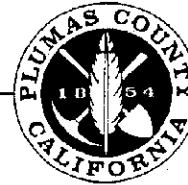


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BOARD OF SUPERVISORS

FRANCES J. ROUDEBUSH, DISTRICT 1
ROBERT A. MEACHER, DISTRICT 2
WILLIAM N. DENNISON, DISTRICT 3
PHILLIP A. BRESCIANI, DISTRICT 4
DONALD C. CLARK, DISTRICT 5



April 13, 1999

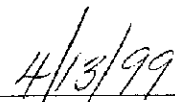
Mr. Jim Wilcox,
Feather River CRM Project Manager
Plumas Corporation
P.O. Box 3880
Quincy, Ca. 95971

Dear, Mr. Wilcox,

The Plumas County Board of Supervisors is in receipt of the Feather River Coordinated Resource Management (FR-CRM) group grant application to the CALFED Bay-Delta Program. Plumas County was a founding signatory member of the FR-CRM and has actively participated in a variety of watershed projects through the CRMP process. This collaboration includes the current Proposition 204 projects awarded to Plumas County.

The Last Chance Watershed Project is a continuation of the previous and current efforts of Plumas County, USFS- Plumas National Forest and the FR-CRM in this key sub-watershed of the Feather River. The Plumas County Board of Supervisors has encouraged the development of this proposal. The Board has reviewed, endorses and supports this application with the intention of fully participating in its implementation.


Chairman, Plumas County Board of Supervisors


Date

Feather River



C OORDINATED
R ESOURCES
M ANAGEMENT

14 April 1999

California Department of
Forestry and Fire Protection

California Department of
Fish and Game

California Department of
Water Resources

California Regional Water
Quality Control Board

Feather River College

North Cal-Neva Resource
Conservation and Development
District

Pacific Gas & Electric Co.

Feather River Resource
Conservation District

Plumas Corporation

Plumas National Forest
USFS, USDA

Plumas Unified School District

Natural Resource Conservation
Service, USDA

U.S. Army Corps of Engineers

U.S. Fish & Wildlife Service

California Department of
Transportation

University of California
Cooperative Extension

California Department of
Parks and Recreation

Plumas County Community
Development Commission

Salmonid Restoration Federation

USDA Farm Services Agency

Plumas County

CALFED Bay-Delta Program Office
1416 Ninth Street, Suite 1155
Sacramento, Ca.
95814

Dear Program Director,

This letter is cover for the enclosed Feather River Coordinated Resource Management (FR-CRM) sponsored application to the Bay-Delta Program for the Last Chance Creek Project. The FR-CRM implementation agency, Plumas Corporation, is the applicant. This project has the broad support of the signatory entities of the FR-CRM and we urge your consideration of this proposal.

The Feather River CRM has long supported the endeavors of CALFED. We view this application as a significant initial contribution to the overall Ecosystem Goals of CALFED. Again, thank you for your consideration.

Sincerely,

John Schramel, Chair
Feather River Coordinated Resource Management

P.O. Box 3880, Quincy, CA 95971 (916) 233-3739

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